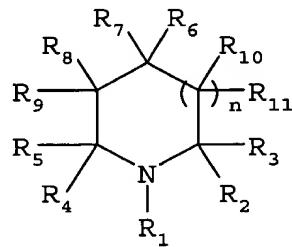


AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method for slowing the progression of a tumor in an animal, which method comprises administering to an animal having a tumor due to a genetic defect in the p53 gene a compound of Formula I ~~or a prodrug thereof~~ in an amount sufficient to slow the progression of the tumor, wherein said tumor is susceptible to treatment by said compound of Formula I ~~or prodrug thereof~~, and wherein said compound of Formula I is defined as:



Formula I

wherein

R₁ is selected from the group consisting of H, OH, OZ, O⁻, and =O, and

Z is selected from the group consisting of a C₁₋₆ aliphatic group, a monocyclic aromatic group, a C₅₋₁₀ alicyclic group, a carbohydrate, a lipid, a nucleic acid and a protein, wherein

R₂, R₃, R₄ and R₅ are independently selected from the group consisting of a C₁₋₆ alkyl group, a C₂₋₆ alkenyl group, a C₂₋₆ alkynyl group, and -CH₂-[CR' R'']_m-CH₃, wherein

R' is selected from the group consisting of hydrogen, a C₁₋₆ aliphatic group, and a monocyclic aromatic group, and

R'' is selected from the group consisting of hydrogen, a C₁₋₆ aliphatic group, a monocyclic aromatic group, a C₅₋₁₀ alicyclic group, a carbohydrate, a lipid, a nucleic acid, and a protein,

m ≤ 4,

wherein

R₆, R₇, R₈ and R₉ are independently selected from the group consisting of hydrogen, a hydroxyl group, a C₁₋₆ aldehydic group, a C₃₋₆ keto group, a primary amino group, a secondary amino group, a tertiary amino group, a sulfido group, a halide, a C₁₋₆ ester-

containing group, a carboxyl group, a phosphato group, a phosphino group, a phosphinato group, a phosphonato group, a C₁₋₆ alkyl group, a C₂₋₆ alkenyl group, a C₂₋₆ alkynyl group, and -CH₂-[CR' R"]_m-CH₃,

wherein

R' is selected from the group consisting of hydrogen, a C₁₋₆ aliphatic group, and a monocyclic aromatic group, and

R" is selected from the group consisting of hydrogen, a C₁₋₆ aliphatic group, a monocyclic aromatic group, a C₅₋₁₀ alicyclic group, a carbohydrate, a lipid, a nucleic acid and a protein, and

m ≤ 4, and

wherein

one of R₆ and R₇ and one of R₈ and R₉ can be absent such that a double bond joins the two carbon atoms to which the remaining R groups are attached,

wherein

n = 0-4 and

wherein

R₁₀ and R₁₁ are independently selected from the group consisting of a C₁₋₆ aliphatic group, a monocyclic aromatic group, a C₁₋₆ ether-containing group, a C₃₋₆ keto group, a C₁₋₆ aldehydic group, a carboxamido group, a cyano group, an amino group, and a carboxyl group.

2.-3. (Canceled)

4. (Withdrawn) The method of claim 1, wherein said aliphatic group is branched, substituted and/or unsaturated.

5. (Withdrawn) The method of claim 4, wherein said aliphatic group is substituted with a member selected from the group consisting of oxygen, phosphorus, selenium, sulfur and nitrogen.

6. (Withdrawn) The method of claim 1, wherein said aromatic group comprises a five- or six-membered ring, in which each of the five or six members is independently selected from the group consisting of carbon and a heteroatom.

7. (Withdrawn) The method of claim 6, wherein said heteroatom is selected from the group consisting of nitrogen, oxygen, sulfur, phosphorus and boron.

8. (Canceled)

9. (Withdrawn) The method of claim 6, wherein said aromatic group is substituted.

10. (Withdrawn) The method of claim 9, wherein said aromatic group is substituted with a heteroatom.

11. (Withdrawn) The method of claim 10, wherein said heteroatom is selected from the group consisting of nitrogen, oxygen, sulfur, phosphorus and boron.

12. (Withdrawn) The method of claim 1, wherein said alicyclic group is substituted and/or unsaturated.

13. (Withdrawn) The method of claim 11, wherein said alicyclic group is substituted with a heteroatom.

14. (Withdrawn) The method of claim 1, wherein said amino group is substituted.

15. (Withdrawn) The method of claim 14, wherein said amino group is substituted with up to three substituents selected from the group consisting of a C₁₋₂₀ aliphatic group, a monocyclic aromatic group, a bicyclic aromatic group, a multicyclic aromatic group, and a C₁₋₂₀ alicyclic group.

16. (Withdrawn) The method of claim 15, wherein said aromatic group comprises a five- or six-membered ring, in which each of the five or six members is independently selected from the group consisting of carbon and a heteroatom.

17. (Withdrawn) The method of claim 16, wherein said heteroatom is selected from the group consisting of nitrogen, oxygen, sulfur, phosphorus and boron.

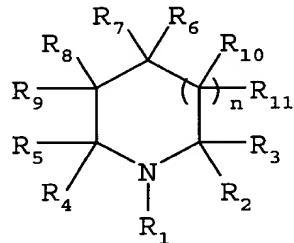
18. (Withdrawn) The method of claim 15, wherein said aromatic group is substituted.

19. (Withdrawn) The method of claim 18, wherein said aromatic group is substituted with a heteroatom.

20. (Withdrawn) The method of claim 19, wherein said heteroatom is selected from the group consisting of nitrogen, oxygen, sulfur, phosphorus and boron.

21. – 27. (Canceled)

28. (Currently Amended) A method for delaying the onset of tumor formation or slowing the progression of a tumor in an animal, which method comprises administering to an animal at risk for developing a tumor, or having a tumor, due to ataxia telangiectasia or Li Fraumeni syndrome a compound of Formula I or a prodrug thereof in an amount sufficient to delay the onset or slow the progression of the tumor, wherein said tumor is susceptible to treatment by said compound of Formula I or prodrug thereof, and wherein said compound of Formula I is defined as:



Formula I

wherein

R₁ is selected from the group consisting of H, OH, OZ, O·, and =O, and

Z is selected from the group consisting of a C₁₋₆ aliphatic group, a monocyclic aromatic group, a C₅₋₁₀ alicyclic group, a carbohydrate, a lipid, a nucleic acid and a protein, wherein

R₂, R₃, R₄ and R₅ are independently selected from the group consisting of a C₁₋₆ alkyl group, a C₂₋₆ alkenyl group, a C₂₋₆ alkynyl group, and -CH₂-[CR' R'']_m-CH₃, wherein

R' is selected from the group consisting of hydrogen, a C₁₋₆ aliphatic group, and a monocyclic aromatic group, and

R'' is selected from the group consisting of hydrogen, a C₁₋₆ aliphatic group, a monocyclic aromatic group, a C₅₋₁₀ alicyclic group, a carbohydrate, a lipid, a nucleic acid, and a protein,

m ≤ 4,

wherein

R_6 , R_7 , R_8 and R_9 are independently selected from the group consisting of hydrogen, a hydroxyl group, a C_{1-6} aldehydic group, a C_{3-6} keto group, a primary amino group, a secondary amino group, a tertiary amino group, a sulfido group, a halide, a C_{1-6} ester-containing group, a carboxyl group, a phosphato group, a phosphino group, a phosphinato group, a phosphonato group, a C_{1-6} alkyl group, a C_{2-6} alkenyl group, a C_{2-6} alkynyl group, and $-CH_2-[CR' R'']_m-CH_3$,

wherein

R' is selected from the group consisting of hydrogen, a C_{1-6} aliphatic group, and a monocyclic aromatic group, and

R'' is selected from the group consisting of hydrogen, a C_{1-6} aliphatic group, a monocyclic aromatic group, a C_{5-10} alicyclic group, a carbohydrate, a lipid, a nucleic acid and a protein, and

$m \leq 4$, and

wherein

one of R_6 and R_7 and one of R_8 and R_9 can be absent such that a double bond joins the two carbon atoms to which the remaining R groups are attached,

wherein

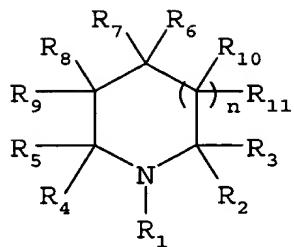
$n = 0-4$ and

wherein

R_{10} and R_{11} are independently selected from the group consisting of a C_{1-6} aliphatic group, a monocyclic aromatic group, a C_{1-6} ether-containing group, a C_{3-6} keto group, a C_{1-6} aldehydic group, a carboxamido group, a cyano group, an amino group, and a carboxyl group.

29. (Cancelled)

30. (Currently Amended) A method for delaying the onset of reducing tumor formation by 50% in one year in an animal, which method comprises administering to an the animal about 0.1 to about 100 mg of a compound of Formula I per kg of body weight or a prodrug thereof in an amount sufficient to delay the onset of tumor formation, wherein said tumor is susceptible to prevention by said compound of Formula I or prodrug thereof, and wherein said compound of Formula I is defined as:



Formula I

wherein

R₁ is selected from the group consisting of H, OH, OZ, O·, and =O, and

Z is selected from the group consisting of a C₁₋₆ aliphatic group, a monocyclic aromatic group, a C₅₋₁₀ alicyclic group, a carbohydrate, a lipid, a nucleic acid and a protein, wherein

R₂, R₃, R₄ and R₅ are independently selected from the group consisting of a C₁₋₆ alkyl group, a C₂₋₆ alkenyl group, a C₂₋₆ alkynyl group, and -CH₂-[CR' R'']_m-CH₃, wherein

R' is selected from the group consisting of hydrogen, a C₁₋₆ aliphatic group, and a monocyclic aromatic group, and

R'' is selected from the group consisting of hydrogen, a C₁₋₆ aliphatic group, a monocyclic aromatic group, a C₅₋₁₀ alicyclic group, a carbohydrate, a lipid, a nucleic acid, and a protein,

m ≤ 4,

wherein

R₆, R₇, R₈ and R₉ are independently selected from the group consisting of hydrogen, a hydroxyl group, a C₁₋₆ aldehydic group, a C₃₋₆ keto group, a primary amino group, a secondary amino group, a tertiary amino group, a sulfido group, a halide, a C₁₋₆ ester-containing group, a carboxyl group, a phosphato group, a phosphino group, a phosphinato group, a phosphonato group, a C₁₋₆ alkyl group, a C₂₋₆ alkenyl group, a C₂₋₆ alkynyl group, and -CH₂-[CR' R'']_m-CH₃,

wherein

R' is selected from the group consisting of hydrogen, a C₁₋₆ aliphatic group, and a monocyclic aromatic group, and

R'' is selected from the group consisting of hydrogen, a C₁₋₆ aliphatic group, a monocyclic aromatic group, a C₅₋₁₀ alicyclic group, a carbohydrate, a lipid, a nucleic acid and a protein, and

m ≤ 4, and

wherein

one of R₆ and R₇ and one of R₈ and R₉ can be absent such that a double bond joins the two carbon atoms to which the remaining R groups are attached,

wherein

n = 0-4 and

wherein

R₁₀ and R₁₁ are independently selected from the group consisting of a C₁₋₆ aliphatic group, a monocyclic aromatic group, a C₁₋₆ ether-containing group, a C₃₋₆ keto group, a C₁₋₆ aldehydic group, a carboxamido group, a cyano group, an amino group, and a carboxyl group.

31. (Withdrawn) The method of claim 30, wherein said aliphatic group is branched, substituted and/or unsaturated.

32. (Withdrawn) The method of claim 31, wherein said aliphatic group is substituted with a member selected from the group consisting of oxygen, phosphorus, selenium, sulfur and nitrogen.

33. (Withdrawn) The method of claim 30, wherein said aromatic group comprises a five- or six-membered ring, in which each of the five or six members is independently selected from the group consisting of carbon and a heteroatom.

34. (Withdrawn) The method of claim 33, wherein said heteroatom is selected from the group consisting of nitrogen, oxygen, sulfur, phosphorus and boron.

35. (Canceled)

36. (Withdrawn) The method of claim 33, wherein said aromatic group is substituted.

37. (Withdrawn) The method of claim 36, wherein said aromatic group is substituted with a heteroatom.

38. (Withdrawn) The method of claim 37, wherein said heteroatom is selected from the group consisting of nitrogen, oxygen, sulfur, phosphorus and boron.

39. (Withdrawn) The method of claim 30, wherein said alicyclic group is substituted and/or unsaturated.

40. (Withdrawn) The method of claim 38, wherein said alicyclic group is substituted with a heteroatom.

41. (Withdrawn) The method of claim 30, wherein said amino group is substituted.

42. (Withdrawn) The method of claim 41, wherein said amino group is substituted with up to three substituents selected from the group consisting of a C₁₋₂₀ aliphatic group, a monocyclic aromatic group, a bicyclic aromatic group, a multicyclic aromatic group, and a C₁₋₂₀ alicyclic group.

43. (Withdrawn) The method of claim 42, wherein said aromatic group comprises a five- or six-membered ring, in which each of the five or six members is independently selected from the group consisting of carbon and a heteroatom.

44. (Withdrawn) The method of claim 43, wherein said heteroatom is selected from the group consisting of nitrogen, oxygen, sulfur, phosphorus and boron.

45. (Withdrawn) The method of claim 42, wherein said aromatic group is substituted.

46. (Withdrawn) The method of claim 45, wherein said aromatic group is substituted with a heteroatom.

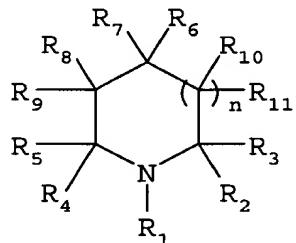
47. (Withdrawn) The method of claim 46, wherein said heteroatom is selected from the group consisting of nitrogen, oxygen, sulfur, phosphorus and boron.

48. (Canceled)

49. (Previously Presented) The method of claim 30, wherein the tumor is caused by a genetic defect in the p53 gene.

50. (New) The method of claim 30, wherein tumor formation is reduced in the spleen.

51. (New) A method of reducing tumor formation by 75% over the lifespan of an animal, which method comprises administering to the animal about 0.1 to about 100 mg of a compound of Formula I per kg of body weight and wherein said compound of Formula I is defined as:



Formula I

wherein

R₁ is selected from the group consisting of H, OH, OZ, O·, and =O, and

Z is selected from the group consisting of a C₁₋₆ aliphatic group, a monocyclic aromatic group, a C₅₋₁₀ alicyclic group, a carbohydrate, a lipid, a nucleic acid and a protein, wherein

R₂, R₃, R₄ and R₅ are independently selected from the group consisting of a C₁₋₆ alkyl group, a C₂₋₆ alkenyl group, a C₂₋₆ alkynyl group, and -CH₂-[CR' R'']_m-CH₃, wherein

R' is selected from the group consisting of hydrogen, a C₁₋₆ aliphatic group, and a monocyclic aromatic group, and

R'' is selected from the group consisting of hydrogen, a C₁₋₆ aliphatic group, a monocyclic aromatic group, a C₅₋₁₀ alicyclic group, a carbohydrate, a lipid, a nucleic acid, and a protein,

m ≤ 4,

wherein

R₆, R₇, R₈ and R₉ are independently selected from the group consisting of hydrogen, a hydroxyl group, a C₁₋₆ aldehydic group, a C₃₋₆ keto group, a primary amino group, a secondary amino group, a tertiary amino group, a sulfido group, a halide, a C₁₋₆ ester-containing group, a carboxyl group, a phosphato group, a phosphino group, a phosphinato group, a phosphonato group, a C₁₋₆ alkyl group, a C₂₋₆ alkenyl group, a C₂₋₆ alkynyl group, and -CH₂-[CR' R'']_m-CH₃,

wherein

R' is selected from the group consisting of hydrogen, a C₁₋₆ aliphatic group, and a monocyclic aromatic group, and

R" is selected from the group consisting of hydrogen, a C₁₋₆ aliphatic group, a monocyclic aromatic group, a C₅₋₁₀ alicyclic group, a carbohydrate, a lipid, a nucleic acid and a protein, and

m ≤ 4, and

wherein

one of R₆ and R₇ and one of R₈ and R₉ can be absent such that a double bond joins the two carbon atoms to which the remaining R groups are attached,

wherein

n = 0-4 and

wherein

R₁₀ and R₁₁ are independently selected from the group consisting of a C₁₋₆ aliphatic group, a monocyclic aromatic group, a C₁₋₆ ether-containing group, a C₃₋₆ keto group, a C₁₋₆ aldehydic group, a carboxamido group, a cyano group, an amino group, and a carboxyl group.

52. (New) The method of claim 51, wherein tumor formation is reduced in the spleen.